

Amendments to the Claims

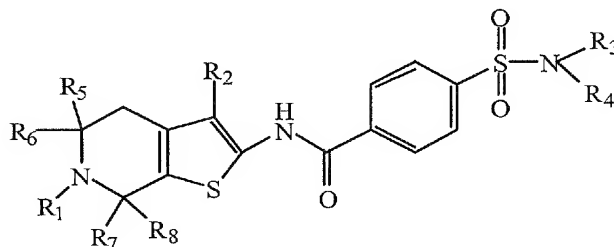
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A thieno[2,3-c]pyridine compound of the formula 2-[[4-[[ethyl(phenylmethyl)amino]sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide.

2. (Original) A thieno[2,3-c]pyridine compound of the formula 2-[[4-[(4-methyl-1-piperazinyl)sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide.

3. (Currently Amended) A pharmaceutical composition comprising as an active ingredient a compound of the general formula I:



wherein:

R₁ is selected from the group consisting of H; straight or branched alkyl of 1-6 carbon atoms; arylalkyl; substituted arylalkyl; cycloalkyl, optionally substituted with alkyl groups; alkanoyl; arylcarbonyl optionally substituted at the aryl group; cycloalkylcarbonyl; alkoxy carbonyl;

R₂ is selected from the group consisting of ~~carboxy; cyano;~~

aminocarbonyl; alkylaminocarbonyl; arylaminocarbonyl optionally substituted at the aryl group; dialkylaminocarbonyl wherein each alkyl is straight or branched chain C₁-C₆ alkyl or both alkyl groups together may form a 3-7 membered saturated, unsaturated or aromatic monocyclic or bicyclic nitrogen containing heterocyclyl, optionally containing one or two additional heteroatoms; ~~alkoxycarbonyl; alkanoyl; cycloalkylcarbonyl; arylcarbonyl optionally substituted on the aryl group; benzothiazol-2-yl;~~

R₃ and R₄ are selected from the group consisting of C₁-C₆ alkyl, optionally substituted by hydroxy, alkoxy, amino or alkylamino, C₂-C₄ monounsaturated alkenyl, cycloalkyl, aryl, arylmethyl, or R₃ and R₄ together may form an optionally substituted 5-7 membered saturated, monocyclic ~~or bicyclic~~ nitrogen containing heterocyclyl, optionally containing one or two additional heteroatoms, or R₃ and R₄ together may form an optionally substituted 5-7 membered unsaturated or aromatic monocyclic or bicyclic nitrogen containing heterocyclyl, optionally containing one or two additional heteroatoms;

R₅, R₆, R₇ and R₈ are selected from the group consisting of H or C₁-C₆ alkyl, with the proviso that when R₅, R₆, R₇ and R₈ are C₁-C₆ alkyl, R₁ is hydrogen;

and pharmaceutically acceptable salts thereof; further comprising a pharmaceutically acceptable diluent or carrier.

4. (Original) The pharmaceutical composition according to claim 3, wherein R₁ is selected from the group consisting of methyl, ethyl, 1-methylethyl, phenylmethyl, acetyl, ethoxycarbonyl and R₅ =R₆ =R₇ =R₈ are hydrogens.

5. (Original) The pharmaceutical composition according to claim 3, wherein R₁ is hydrogen and R₅ =R₆ =R₇ =R₈ are

hydrogens or methyl groups.

6. (Original) The pharmaceutical composition according to claim 3, wherein $R_1 = R_5 = R_6$ is methyl and $R_7 = R_8$ are hydrogens.

7. (Currently Amended) The pharmaceutical composition according to claim 3, wherein R_2 is selected from the group consisting of ~~cyano, methoxycarbonyl, ethoxycarbonyl,~~ aminocarbonyl, methylaminocarbonyl, dimethylaminocarbonyl, pyrrolidinylcarbonyl, piperidinylcarbonyl, morpholinylcarbonyl, benzothiazol-2-yl.

8. (Original) The pharmaceutical composition according to claim 3, wherein R_3 and R_4 are selected from the group consisting of methyl, ethyl, propyl, butyl, methoxyethyl, chlorobutyl, cyanoethyl, phenyl, cyclopentyl, cyclohexyl, phenylmethyl, allyl or crotyl, R_3 and R_4 may be equal or different.

9. (Currently Amended) The pharmaceutical composition according to claim 3, wherein R_3 and R_4 form pyrrolidine, piperidine, 2-methyl, 3-methyl, 4-methyl or 3,5-dimethyl piperidine, perhydroazepine, morpholine, piperazine, 4-methylpiperazine, 3,4-dihydro-2(1H)-isoquinolinyl, 3,4-dihydro-1(2H)quinoline, ~~1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-ane~~ and substituted derivatives thereof.

10. (Currently Amended) The pharmaceutical composition according to claim 3 wherein the compound of Formula I is selected from:

2-[[4-[(ethylbutylamino) sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-

c]pyridine;

2-[[4-(3,4-dihydro-2(1H)-isoquinolinyl)sulfonyl] benzoyl] amino]-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;

2-[[4-(methylphenylamino)sulfonyl] benzoyl] amino]-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;

2-[[4-(3,4-dihydro-2(1H)-isoquinolinyl)sulfonyl] benzoyl] amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethyl thieno[2,3-c]pyridine-3-carboxamide; 2-[[4-[(diethylamino)sulfonyl] benzoyl] amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-(morpholinyl)sulfonyl] benzoyl] amino]-3-(benzothiazol-2-yl)-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

~~2-[[4-(diethylamino)sulfonyl] benzoyl] amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethyl thieno[2,3-c]pyridine-3-carboxylic acid ethyl ester;~~

2-[[4-(3,4-dihydro-1(2H)-quinolinyl)sulfonyl] benzoyl] amino]-3-(benzothiazol-2-yl)-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine;

~~2-[[4-(hexahydro-1H-azepin-1-yl)sulfonyl] benzoyl] amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethyl thieno[2,3-c]pyridine-3-carboxylic acid ethyl ester;~~

2-[[4-[[4-(methyl)-1-piperazinyl]sulfonyl]benzoyl] amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

~~2-[[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)sulfonyl]benzoyl] amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;~~

2-[[4-[(methylphenylamino)sulfonyl]benzoyl] amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-

c]pyridine;

2-[[4-(morpholinylsulfonyl) benzoyl] amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

~~2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-6-carboxylic acid ethyl ester;~~

2-[[4-[[4-(3-methyl-1-piperidinyl)]sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-(phenylmethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[[4-(ethoxycarbonyl)-1-piperazinyl]sulfonyl]benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxamide;

2-[[4-[(cyclohexylmethylamino)sulfonyl]benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxamide;

~~2-[[4-[(di-2-propenylamino)sulfonyl]benzoyl]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxylic acid methyl ester;~~

2-[[4-[(di-2-methoxyethylamino)]sulfonyl]benzoyl]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxamide;

~~2-[[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)sulfonyl]benzoyl]amino]-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;~~

2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-

(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(diethylamino) sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(di-2-methoxyethylamino) sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(methylphenylamino) sulfonyl]benzoyl] amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[[4-(ethoxycarbonyl)-1-piperazinyl]sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

~~2-[[4-[(methylbutylamino) sulfonyl]benzoyl]amino]-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid ethyl ester;~~

~~2-[[4-[[4-(ethoxycarbonyl)-1-piperazinyl]sulfonyl]benzoyl]amino]-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid ethyl ester;~~

2-[[4-(diethylamino) sulfonyl] benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxamide;

2-[[4-[(methylphenylamino) sulfonyl] benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid methylamide;

2-[[4-[[ethyl(phenylmethyl) amino] sulfonyl] benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;

2-[[4-[(4-methyl-1-piperazinyl) sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;

2-[[4-(3,4-dihydro-1(2H)-quinolinyl)sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid methylamide;

2-[[4-[(4-methyl-1-piperazinyl)sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid methylamide;

2-[[4-[(4-methyl-1-piperazinyl)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-(diethylamino)sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid N-methylamide;

2-[[4-(diethylamino)sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid morpholinylamide.

11. (Currently Amended) The pharmaceutical composition according to claim 10 wherein the compound of formula I is:
2-[[4-[(ethylbutylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine+.

12. (Currently Amended) The pharmaceutical composition according to claim 10 wherein the compound of formula I is:
2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine+.

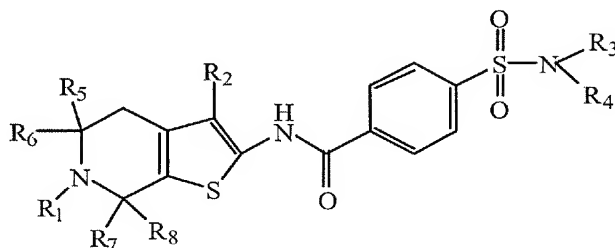
13. (Original) The pharmaceutical composition according to claim 10 wherein the compound of formula I is:
2-[[4-[[ethyl(phenylmethyl)amino]sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydro thieno[2,3-c]pyridine-3-carboxamide.

14. (Original) The pharmaceutical composition according to claim 10 wherein the compound of formula I is:

2-[[4-[(4-ethyl-1-piperazinyl)sulfonyl] benzoyl] amino]-6-ethyl-4,5,6,7-tetrahydrothieno [2,3-c]pyridine-3-carboxamide.

Claims 15-20 (Cancelled).

21. (Currently Amended) A method for the treatment or prevention of diseases or disorders related to cell adhesion or cell migration mediated by GAG-ECAM L-selectin interactions, comprising the step of administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition comprising a compound of the general formula I:



wherein:

R₁ is selected from the group consisting of H; straight or branched alkyl of 1-6 carbon atoms; arylalkyl; substituted arylalkyl; cycloalkyl, optionally substituted with alkyl groups; alkanoyl; arylcarbonyl optionally substituted at the aryl group; cycloalkylcarbonyl; alkoxy carbonyl;

R₂ is selected from the group consisting of ~~carboxy~~, ~~cyano~~, aminocarbonyl; alkylaminocarbonyl; arylaminocarbonyl optionally substituted at the aryl group; dialkylaminocarbonyl

wherein each alkyl is straight or branched chain C₁-C₆ alkyl or both alkyl groups together may form a 3-7 membered saturated, unsaturated or aromatic monocyclic or bicyclic nitrogen containing heterocyclyl, optionally containing one or two additional heteroatoms; ~~alkoxycarbonyl, alkanoyl, cycloalkylcarbonyl, arylcarbonyl optionally substituted on the aryl group, benzothiazol-2-yl;~~

R₃ and R₄ are selected from the group consisting of C₁-C₆ alkyl, optionally substituted by hydroxy, alkoxy, amino or alkylamino, C₂-C₄ monounsaturated alkenyl, cycloalkyl, aryl, arylmethyl, or R₃ and R₄ together may form an optionally substituted 5-7 membered saturated, monocyclic ~~or bicyclic~~ nitrogen containing heterocyclyl, optionally containing one or two additional heteroatoms, or R₃ and R₄ together may form an optionally substituted 5-7 membered unsaturated or aromatic monocyclic or bicyclic nitrogen containing heterocyclyl, optionally containing one or two additional heteroatoms;

R₅, R₆, R₇ and R₈ are selected from the group consisting of H or C₁-C₆ alkyl, with the proviso that when R₅, R₆, R₇ and R₈ are C₁-C₆ alkyl, R₁ is hydrogen;

and pharmaceutically acceptable salts thereof; further comprising a pharmaceutically acceptable diluent or carrier.

22. (Original) The method according to claim 21 wherein R₁ is selected from the group consisting of methyl, ethyl, 1-methylethyl, phenylmethyl, acetyl, ethoxycarbonyl and R₅ =R₆ =R₇ =R₈ are hydrogens.

23. (Original) The method according to claim 21 wherein R₁ is hydrogen and R₅ =R₆ =R₇ =R₈ are hydrogens or methyl groups.

24. (Original) The method according to claim 21 wherein $R_1 = R_5 = R_6$ is methyl and $R_7 = R_8$ are hydrogens.

25. (Currently Amended) The method according to claim 21 wherein R_2 is selected from the group consisting of ~~cyano~~, methoxycarbonyl, ~~ethoxycarbonyl~~aminocarbonyl, methylaminocarbonyl, dimethylaminocarbonyl, pyrrolidinylcarbonyl, piperidinylcarbonyl, morpholinylcarbonyl, (3,5-dimethyl-1H-pyrazolyl) carbonyl, benzothiazol-2-yl.

26. (Original) The method according to claim 21 wherein R_3 and R_4 are selected from the group consisting of methyl, ethyl, propyl, butyl, methoxyethyl, chlorobutyl, cyanoethyl, phenyl, cyclopentyl, cyclohexyl, phenylmethyl, allyl or crotyl, R_3 and R_4 may be equal or different.

27. (Currently Amended) The method according to claim 21 wherein R_3 and R_4 form pyrrolidine, piperidine, 2-methyl, 3-methyl, 4-methyl or 3,5-dimethyl piperidine, perhydroazepine, morpholine, piperazine, 4-methylpiperazine, 3,4-dihydro-2(1H)-isoquinolinyll, 3,4-dihydro-1(2H)quinoline, ~~1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-ane~~ and substituted derivatives thereof.

28. (Currently Amended) The method according to claim 21 wherein the compound of formula I is selected from:

2-[[4-[(ethylbutylamino) sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-(3,4-dihydro-2(1H)-isoquinolinyll sulfonyl]benzoyl]amino]-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;

2-[[4-(methylphenylamino)sulfonyl] benzoyl]amino]-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;

2-[[4-(3,4-dihydro-2(1H)-isoquinolinyl)sulfonyl] benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethyl thieno[2,3-c]pyridine-3-carboxamide;

2-[[4-[(diethylamino)sulfonyl] benzoyl]amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-(morpholinylsulfonyl) benzoyl]amino]-3-(benzothiazol-2-yl)-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

~~2-[[4-(diethylamino)sulfonyl] benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethyl thieno[2,3-c]pyridine-3-carboxylic acid ethyl ester;~~

2-[[4-(3,4-dihydro-1(2H)-quinolinyl)sulfonyl] benzoyl]amino]-3-(benzothiazol-2-yl)-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine;

~~2-[[4-(hexahydro-1H-azepin-1-yl)sulfonyl] benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethyl thieno[2,3-c]pyridine-3-carboxylic acid ethyl ester;~~

2-[[4-[[4-(methyl)-1-piperazinyl]sulfonyl] benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

~~2-[[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)sulfonyl] benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;~~

2-[[4-[(methylphenylamino)sulfonyl] benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-(morpholinylsulfonyl) benzoyl] amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-

c]pyridine;

~~2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-6-carboxylic acid ethyl ester;~~

2-[[4-[[4-(3-methyl-1-piperidiny)]sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-(phenylmethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[[4-(ethoxycarbonyl)-1-piperazinyl]sulfonyl]benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxamide;

2-[[4-[(cyclohexylmethylamino)sulfonyl]benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxamide;

~~2-[[4-[(di-2-propenylamino)sulfonyl]benzoyl]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxylic acid methyl ester;~~

2-[[4-[(di-2-methoxyethylamino)]sulfonyl]benzoyl]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxamide;

~~2-[[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1.]oct-6-yl)sulfonyl]benzoyl]amino]-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;~~

2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(diethylamino)sulfonyl]benzoyl]amino]-3-

(benzothiazol-2-yl)-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(di-2-methoxyethylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[(methylphenylamino)sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-[[4-(ethoxycarbonyl)-1-piperazinyl]sulfonyl]benzoyl]amino]-3-(benzothiazol-2-yl)-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

~~2-[[4-[(methylbutylamino)sulfonyl]benzoyl]amino]-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid ethyl ester;~~

~~2-[[4-[[4-(ethoxycarbonyl)-1-piperazinyl]sulfonyl]benzoyl]amino]-6-(1-methylethyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid ethyl ester;~~

2-[[4-(diethylamino)sulfonyl]benzoyl]amino]-4,5,6,7-tetrahydro-5,5,7,7-tetramethylthieno[2,3-c]pyridine-3-carboxamide;

2-[[4-[(methylphenylamino)sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid methylamide;

2-[[4-[[ethyl(phenylmethyl)amino]sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;

2-[[4-[(4-methyl-1-piperazinyl)sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide;

2-[[4-[(3,4-dihydro-1(2H)-quinolinyl)sulfonyl]benzoyl]amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid methylamide;

2-[[4-[(4-methyl-1-piperazinyl)sulfonyl]benzoyl]amino]

-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid methylamide;

2-[[4-[(4-methyl-1-piperazinyl)sulfonyl] benzoyl] amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine;

2-[[4-(diethylamino)sulfonyl] benzoyl] amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid N-methylamide;

2-[[4-(diethylamino)sulfonyl] benzoyl] amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid morpholinylamide.

29. (Currently Amended) The method according to claim 28 wherein the compound of formula I is:

2-[[4-[(ethylbutylamino) sulfonyl]benzoyl] amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-~~+~~-.

30. (Currently Amended) The method according to claim 28 wherein the compound of formula I is:

2-[[4-[(diethylamino)sulfonyl] benzoyl] amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-~~+~~-.

31. (Original) The method according to claim 28 wherein the compound of formula I is:

2-[[4-[[ethyl(phenylmethyl) amino] sulfonyl]benzoyl] amino]-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide.

32. (Original) The method according to claim 28 wherein the compound of formula I is:

2-[[4-[(4-ethyl-1-piperazinyl)sulfonyl]benzoyl] amino]-6-

ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxamide.

33. (Currently Amended) The method according to claim 21 wherein the disease or disorder related to cell adhesion or cell migration is ~~selected from the group consisting of an inflammatory process, an autoimmune process or disease, platelet mediated pathologies, tumor metastasis, viral diseases, atherosclerosis, amyloid disorders, and kidney disease.~~

Claims 34-41 (Cancelled).

42. (Original) A method for the prevention or treatment of inflammatory bowel disease comprising the step of administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition comprising as an active ingredient a thieno[2,3-c]pyridine compound of formula 2-[[4-[(diethylamino)sulfonyl] benzoyl]amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine and a pharmaceutically acceptable salt thereof; further comprising a pharmaceutically acceptable carrier or diluent.

43. (Original) A method for the prevention or treatment of multiple sclerosis comprising the step of administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition comprising as an active ingredient a thieno[2,3-c]pyridine compound of formula 2-[[4-[(diethylamino)sulfonyl] benzoyl]amino]-3-(benzothiazol-2-yl)-6-ethyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine and a pharmaceutically acceptable salt thereof; further comprising a pharmaceutically acceptable carrier or diluent.